## COMPLETE LISTING OF CLAIMS

## IN ASCENDING ORDER WITH STATUS INDICATOR

Claim 1 (currently amended): In an objective zoom lens for an electronic camera, the objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane, an improvement comprising:

an optical element located within the relay lens group on an optical axis of the zoom lens, the optical element sandwiched between two adjacent lens elements of a substantially similar diameter located within the relay lens group that do not move with respect to each other ~~having a surface at a location selected along the optical axis~~ such that the optical element will receive light rays substantially collimated and perpendicular to ~~said~~a surface of the optical element and parallel to the optical axis regardless of the movement of the zoom lens group, and

a coating on said optical element surface forming an interference filter for causing a modification of the spectrum of light waves supplied to the camera in a manner for the camera to simulate a predetermined spectrum of light rays.

Claim 2 (previously presented): The objective zoom lens of claim 1, wherein said optical element surface is optically flat.

Claim 3 (previously presented): The objective zoom lens of claim 1, wherein said optical element is removable and replaceable from the objective zoom lens.

Claim 4 (previously presented): The objective zoom lens of claim 3, further including a replacement optical element having substantially the same optical characteristics and without said coating.

Claim 5 (previously presented): The objective zoom lens of claim 1, wherein said location along the optical axis is adjacent the optical stop of the objective zoom lens.

Claim 6 (canceled)

Claim 7 (previously presented): The objective zoom lens of claim 1, wherein said location along the optical axis allows zooming of the objective zoom lens by moving the zoom lens group without substantially changing an angle of incidence of the light rays on said surface.

Claim 8 (canceled)

Claim 9 (previously presented): The objective zoom lens of claim 1, wherein said coating includes layers of low refractive index material and layers of high refractive index materials for producing said predetermined spectrum of light rays.

Claim 10 (currently amended): In an objective zoom lens for an electronic camera, the objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane, an improvement comprising;

an optically flat optical element located within the relay lens group on an optical axis of the zoom lens and sandwiched between two adjacent lens elements of a substantially similar diameter located within the relay lens group that do not move with respect to each other~~, on and perpendicular to an optical axis of the lens at a location selected along the optical axis~~ such that the optical element will receive substantially collimated light rays substantially perpendicular to the optical element and parallel to the optical axis regardless of the movement of the zoom lens group, and

a coating on said optical element forming an interference filter for causing a modification of the spectrum of light waves supplied to the camera in a manner for the camera to simulate a predetermined spectrum of light rays.

Claim 11 (previously presented): The objective zoom lens of claim 10, wherein said optical element is removable and replaceable from the objective zoom lens.

Claim 12 (previously presented): The objective zoom lens of claim 11, further including a replacement optical element having substantially the same optical characteristics and without said coating.

Claim 13 (previously presented): The objective zoom lens of claim 10, wherein said location along the optical axis is adjacent the optical stop of the objective zoom lens.

Claim 14 (canceled)

Claim 15 (previously presented): The objective zoom lens of claim 10, wherein said location along the optical axis allows zooming of the objective zoom lens by moving the zoom lens group without substantially changing an angle of incidence of the light rays on said surface.

Claim 16 (canceled)

Claim 17 (previously presented): The objective zoom lens of claim 10, wherein said coating includes layers of low refractive index material and layers of high refractive index materials for producing said predetermined spectrum of light rays.

Claim 18 (currently amended): A method for causing an electronic camera to sense and reproduce a predetermined spectrum of light rays, comprising the steps of:

providing the camera with an objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane,

providing an optical element surface located within the relay lens group and sandwiched between two adjacent lens elements of a substantially similar diameter located within the relay lens group that do not move with respect to each other at a location where the light rays are substantially collimated and perpendicular to the optical element surface and parallel to an optical axis regardless of the movement of the zoom lens group, and

providing the optical element surface with a coating forming an interference filter for modifying the spectrum of light rays to the predetermined spectrum for supplying to the camera.

Claim 19 (previously presented): The method according to claim 18, including the step of removing and replacing the optical element having said surface with another optical element having a surface with a different coating forming an interference filter for modifying the spectrum of light rays to a different predetermined spectrum.

Claim 20 (original): The method according to claim 18, including the step of selecting said coating for said optical element surface for modifying the spectrum of light rays to simulate the predetermined spectrum of a film emulsion of film for a film camera.

Claim 21 (previously presented): The method according to claim 18, including the step of selecting the location of the optical element surface within the relay lens group on the basis of the location having minimum ray incident angles at the surface.

Claim 22 (original): The method according to claim 21, wherein the maximum ray incident angle on the surface is 15°.

Claim 23 (currently amended): A method for causing an electronic camera to sense and reproduce a predetermined spectrum of light rays, comprising the steps of:

providing the camera with an objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane,

providing an optical element located within the relay lens group sandwiched between two adjacent lens elements of a substantially similar diameter located within the relay lens group that do not move with respect to each other at a location of substantially collimated light rays substantially perpendicular to the optical element and parallel to an optical axis regardless of the movement of the zoom lens group, and

providing the optical element with a coating forming an interference filter for modifying the spectrum of light rays to the predetermined spectrum for supplying to the camera.

Claim 24 (original): The method according to claim 21, wherein the optical element is optically flat.

Claim 25 (currently amended): An objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane for causing an electronic camera to sense and reproduce a predetermined spectrum of light rays, comprising:

an optical element located within the relay lens group sandwiched between two adjacent lens elements of a substantially similar diameter located within the relay lens group that do not move with respect to each other at a location of substantially collimated light rays substantially perpendicular to the optical element and parallel to an optical axis regardless of the movement of the zoom lens group, and

a coating on said optical element forming an interference filter for modifying the spectrum of light rays to the predetermined spectrum for supplying to the camera.

Claim 26 (currently amended): In an objective zoom lens for an electronic camera, the objective zoom lens having a movable zoom lens group located between object space and an optical stop, and a relay lens group located between the optical stop and an image plane, a method for performing spectral filtering on light rays received into the objective zoom lens and maintaining that spectral filtering throughout zooming of the objective zoom lens, the method comprising:

coating a surface of an optical element to form an interference filter for causing a modification of a spectrum of the light rays received into the objective zoom lens;

identifying a location within the relay lens group between two adjacent lens elements of a substantially similar diameter that do not move with respect to each other at which the light rays are substantially collimated and parallel to an optical axis, regardless of the movement of the zoom lens group; and

placing an optical element at the location, the optical element sandwiched between the two adjacent lens elements, and orienting the optical element such that the light rays are perpendicular to the surface of the optical element regardless of the movement of the zoom lens group.